SUB A37

14. A data-centric hazard communication apparatus comprising:

a) an authoring module having an automated means for decompiling material data; and a rules engine for automatically associating the decompiled data with hazard information by associating words and phrases with the decompiled data for use in the production of documents and system output to provide hazard information about the material, its components, decomposition products of the material, and substances related to the material; and

b) a means for disseminating hazard information about said material, its components, decomposition products of the material, and substances related to the material wherein said means for disseminating hazard information communicates with said authoring module.

Module having an automated means for decompiling material data; an automated means for associating the decompiled data with hazard information; and a means for recompiling material data associated with hazard information to provide hazard information about the material, its components, decomposition products of the material, and substances related to the material.

16. The apparatus of claim 15 wherein said means for associating the decompiled data with hazard information is a rules engine for associating -words and phrases with the decompiled data for use in the production of documents and system output.

17. A data-centric hazard communication apparatus comprising an authoring module having an automated means for decompiling material data; and a rules engine for automatically associating the decompiled data with hazard information by associating words and phrases with the decompiled data for use in the production of documents and system output to provide hazard information about the material, its components, decomposition products of the material, and substances related to the material.

A marked-up version showing changes made is attached hereto.

### <u>REMARKS</u>

Claims 1-13 are pending in the application. Claims 1-13 are rejected. Claims 1 and 12 are amended herein to more clearly distinguish the invention. Claims 14-17 are added. Antecedent basis for the amendment to claim 1 and the new claims 14-17 are found in the specification.



### 1. Summary of the Invention

The present invention allows companies to create and distribute hazard communication documents to comply with regulatory and business requirements. It allows maximum user control and flexibility to meet current and future requirements without software code changes, to the extent possible.

The system is a flexible, data-centric, client server application that provides user-controlled document creation to comply with regulatory requirements. It is used to store and maintain material specific information including materials composition, physical and chemical properties, health effect hazards, environmental toxicology and fate classifications, regulatory information, transportation, and employee protection. The system is a repository for product stewardship information and can be used to set-up to facilitate compliance with various reporting and hazard communication requirements, and international regulatory requirements. The system further allows MSDS and label text assignment by user-defined rules that provide consistency and ease-of-use; features rule configuration by country and/or regulatory agency that allows simple creation of multiple documents at the country, agency and language level; contains processors that automatically associate regulatory data with a material record; calculates certain data points and determines the level of all constituents of mixtures (and mixtures of mixtures); and provides translated standard phrases, graphics, and key data conversion and allows creation of multilingual documents with imbedded graphics.

## 2. Rejection Under 35 U.S.C. § 112

Claims 12-13 are rejected under 35 U.S.C. § 112, second paragraph. Applicants submit the amendments herein obviate the rejection.

Claim 12 is amended to provide proper antecedent basis for the computer programming code, specifically the claim now correctly points to claim 11.

Applicants respectfully request reconsideration of the claims as amended and withdrawal of the 35 U.S.C. § 112 rejection thereto.

# 3. Rejection Under 35 U.S.C. § 102

Claims 1-13 are rejected under 35 U.S.C. § 102(a) as being anticipated by Henderson (US 5,712,990). The rejection is traversed.

Claims 1, 8 and 9 and their depending claims distinguish Henderson by using automated deblending and substance processing to achieve automated classification. The automated deblending process of the present invention creates decompiled hazard information about a material and about materials related to the material. As a result, the user can view hazard assessments for the related materials (ingredients of the mixture as well as materials in

the same family as the mixture and its ingredients) to derive what the hazard assessment of the mixture in question should be (see page 9 of the disclosure). Henderson neither discloses nor teaches automated deblending and substance processing to achieve automated classification. Conversely, Henderson teaches a system where the user must provide all of the data about each substance.

Claims 1, 8 and 9 and their depending claims further distinguish Henderson by requiring the automated, systematic application of rules. Henderson neither teaches or suggests the application of rules or a rules engine for associating words and phrases with decompiled data for use in the production of documents and system output to provide hazard information about the material, its components, decomposition products of the material, and substances related to the material. The method of the invention utilizes a rules engine which applies a set of predetermined or programmed rules to the material records so that standard phrases are associated with the substance in the communication produced by the system. Quite differently, Henderson associates a government-published name/label to identify a hazard or common chemical name and stores reportable quantity and inhalation hazard which "are required by law to be incorporated into determination of a proper shipping name (PSN). Such process steps do not teach or suggest the sophisticated logic or rules assessment of the present invention, but instead teach a key word search and match to select a PSN.

Applicants respectfully request reconsideration of claims 1-13 and withdrawal of the 35 U.S.C. § 102 rejection thereto.

In view of the remarks, Applicant respectfully submits the claims are now in condition for allowance. Reconsideration and withdrawal of the rejections of claims 1-13 is requested. Allowance of claims 1-17 is solicited.

Respectfully submitted,

JANICE LYNN FARMER ET AL.

P. O. Box 2463 Houston, Texas 77252-2463 Their Attorney, Beverlee 6. Steinberg

Registration No. 37,736

(713) 241-7256

## MARKED UP VERSION SHOWING CHANGES MADE

#### In the Claims

- 1. (Amended) A data-centric hazard communication apparatus comprising:
- a) an authoring module having an <u>automated</u> means for decompiling material data, an <u>automated</u> means for associating the decompiled data with hazard information, and a means for recompiling material data associated with hazard information to provide hazard information about the material, its components, decomposition products of the material, and substances related to the material; and
- b) [and] a means for disseminating hazard information about said material, its components, decomposition products of the material, and substances related to the material wherein said means for disseminating hazard information communicates with said authoring module.
- 12. (Amended) The machine of claim [10] 11 wherein said computer programming code comprises software.